



**Product:** [29505T](#) 

VFD 300% Gnd, 3C+G #6 Str TC, XLPE Ins+PVC Grd, OS+TC Brd w/4-#12 TC Drains, Blk LSZH Jkt, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC

## Product Description

Belden 300% Ground Flexible VFD, 3 Conductor 6AWG (7x19x27) Tinned Copper, XLPE Insulation M4 Color Code+PVC Insulated Ground, Overall Beldfoil®+Tinned Copper Braid(85%) Shield w/4-12AWG Tinned Copper Drains, Black LSZH Outer Jacket, 600/1000V TC-ER 90C Dry/Wet 1000V Flexible Motor Supply Cable WTTC SUN RES DIR BUR

## Technical Specifications

### Product Overview

Suitable Applications:	Variable Frequency Drives (VFD); AC Motor and Drive Systems; Human safety applications with flame or toxicity concerns (low smoke, zero halogen)
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### Construction Details

#### Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	6 AWG	7x19x27	TC - Tinned Copper
Ground	1	6 AWG	7x19x27	TC - Tinned Copper

#### Insulation

Element	Material	Nom. Thickness	Color Code
Conductor(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.062 in (1.6 mm)	Black and Numbered
Ground	PVC - Polyvinyl Chloride	0.062 in (1.6 mm)	Green/Yellow Stripe

#### Outer Shield

Shield Type	Material	Coverage
Tape	Tri-Laminate (Alum+Poly+Alum)	100%
Braid	Tinned Copper (TC)	85%

#### Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.095 in (2.4 mm)	1.002 in (25.45 mm)	Yes

Overall Cable Diameter (Nominal):	1.002 in (25.45 mm)
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### Electrical Characteristics

#### Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Conductor(s)	0.384 Ohm/1000ft (1.26 Ohm/km)	4.99 Ohm/1000ft (16.4 Ohm/km)	23 pF/ft (75 pF/m)	42 pF/ft (140 pF/m)	42 pF/ft (140 pF/m)	80 Ohm	55%	75 Amps per Conductor at 30°C

#### Voltage

UL Voltage Rating
1000 V (TC, WTTC, UL Flexible Motor Supply Cable)

### Mechanical Characteristics

#### Temperature

UL Temperature	Operating
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90°C Dry, 90°C Wet	-25°C To +90°C
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Bend Radius

Stationary Min.	Installation Min.
12.0 in (305 mm)	12.0 in (305 mm)

Max. Pull Tension:	1358 lbs (616.0 kg)
Bulk Cable Weight:	782 lbs/1000ft (1160 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	UL1685 FT4 Loading
NEC / UL Compliance:	Article 336, TC-ER, WTTTC, UL Flexible Motor Supply Cable
ICEA Compliance:	S-95-658
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.263 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	UPC
29505T 0101000	Black	Reel	612825137191
29505T 0103500	Black	Reel	612825137207

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